

WHAT IS CLAIMED IS:

1. A method for detecting malicious scripts using a static analysis, comprising the step of:
checking whether a series of methods constructing a malicious code pattern exist and
5 whether parameters and return values associated between the methods match each other,
wherein the checking step comprises the steps of:
classifying, by modeling a malicious behavior in such a manner that it includes a
combination of unit behaviors each of which is composed of sub-unit behaviors or one or more
method calls, each unit behavior and method call sentence into a matching rule for defining
10 sentence types to be detected in script codes and a relation rule for defining a relation between
patterns matched so that the malicious behavior can be searched by analyzing a relation between
rule variables used in the sentences satisfying the matching rule;
generating instances of the matching rule by searching for code patterns matched with the
matching rule from a relevant script code to be detected, extracting parameters of functions used in
15 the searched code patterns, and storing the extracted parameters in the rule variables; and
generating instances of the relation rule by searching for instances satisfying the relation
rule from a set of the generated instances of the matching rule.
2. The method according to claim 1, wherein the matching rule is composed of rule identifiers
and sentence patterns constructing malicious behavior and having the same grammar as a language
20 of the scripts to be detected, and wherein the relation rule comprises conditional expressions (Cond)
in which conditions satisfying the relevant rule are described, and action expressions (Action) in
which contents to be executed are described when the conditions in the conditional expressions are
satisfied.
- 25 3. The method according to claim 2, wherein the relation rule further includes preconditions
(Precond) in which conditions that should be satisfied prior to the conditions in the conditional
expressions are described, and
the action expressions describe contents that will be executed when both the conditional
expressions and the preconditions are satisfied.

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